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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known	
Application Numb r	Not yet Assigned
Filing Date	December 8, 2003
First Named Inventor	Julian Adams, et al.
Group Art Unit	~~N/A~~ 1626
Examiner Name	~~N/A~~ Janet Coppins
Attorney Docket Number	MPI94-008CP2DV2CN5M

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document (MM-DD-YYYY)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JLC	AA	5,187,157		Kettner, et al.	02-16-1993	Entire document
	AB	5,250,720		Kettner, et al.	10-05-1993	Entire document
	AC	5,106,948		Kinder, et al.	04-21-1992	Entire document
	AD	5,424,904		Kettner, et al.	09-07-1993	Entire document
	AE	6,066,730		Adams, et al.	05-02-2000	Entire document
	AF	5,780,454		Adams, et al.	07-00-1998	Entire document
	AG	6,083,903		Adams, et al.	07-00-2000	Entire document
	AH	5,574,017		Gutheil	11-12-1996	Entire document
	AI	5,990,083		Iqbal, et al.	11-23-1999	Entire document
	AJ	4,261,868		Hora, et al.	04-14-1981	Entire document
	AK	4,369,183		Jones, et al.	01-18-1983	Entire document
	AL	4,499,082		Shenvi, et al.	02-12-1985	Entire document
	AM	4,537,707		Severson, R. Jr.	08-27-1985	Entire document
	AN	4,537,773		Shenvi, A.	08-27-1985	Entire document
	AO	4,842,769		Shulman, et al.	06-27-1989	Entire document
	AP	4,963,655		Kinder, et al.	10-16-1990	Entire document
	AQ	4,997,929		Collins, et al.	03-05-1991	Entire document
	AR	5,030,378		Venegas, M.	07-09-1991	Entire document
	AS	5,169,841		Kleeman, et al.	12-08-1992	Entire document
	AT	5,550,262		Iqbal, et al.	08-27-1996	Entire document
	AU	5,614,649		Iqbal, et al.	03-25-1997	Entire document
JLC	AV	4,510,130		Platt, et al.	04-09-1985	Entire document

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Code[5] Office[3]	Number[4]	Kind (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document (MM-DD-YYYY)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
JLC	BA	WO	93/01828			02-04-1993	Entire document.	
	BB	EP	0 315 574			05-10-19989	Entire document.	
	BC	WO	95/25533			09-28-1995	Entire document.	
	BD	WO	95/24914			09-21-1995	Entire document.	
	BE	EP	0 145 441			06-19-1985	Entire document.	
	BF	EP	0 293 881			12-07-1988	Entire document.	
JLC	BG	WO	88/10266			12-29-1988	Entire document.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 2

Complete if Known	
Application Number	Not yet Assigned
Filing Date	December 8, 2003
First Named Inventor	Julian Adams, et al.
Group Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	MPI94-008CP2DV2CN5M

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JLC	BH	EP	0 354 522			02-14-1990	Entire document.	
	BI	DE	38 27 340			02-15-1990	Entire document.	
	BJ	EP	0 363 284			04-11-1990	Entire document.	
	BK	EP	0 364,344			04-18-1990	Entire document.	
	BL	EP	0 381 262			08-08-1990	Entire document.	
	BM	EP	0 393 457			10-24-1990	Entire document.	
	BN	WO	91/13904			09-19-1991	Entire document.	
	BO	EP	0 471 651			02-19-1992	Entire document.	
	BP	EP	0 478 050			04-01-1992	Entire document.	
	BQ	WO	92/07869			05-14-1992	Entire document.	
	BR	WO	92/11850			07-23-1992	Entire document.	
	BS	WO	92/12140			07-23-1992	Entire document.	
	BT	EP	0 511 456			11-04-1992	Entire document.	
	BU	WO	92/19707			11-12-1992	Entire document.	
	BV	WO	92/19709			11-12-1992	Entire document.	
	BW	WO	93/21213			10-28-1993	Entire document.	
	BX	WO	93/21214			10-28-1993	Entire document.	
	BY	EP	0 583 536			02-23-1994	Entire document.	
	BZ	WO	94/21668			09-29-1994	Entire document.	
	BBA	WO	94/23045			10-13-1994	Entire document.	
JLC	BBB	WO	95/09858			04-13-1995	Entire document.	

Examiner Signature	Jeet L Cpsi	Date Considered	1/10/05

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Sheet 1 of 3

Complete if Known	
Application Number	Not yet Assigned
Filing Date	December 8, 2003
First Named Inv ntor	Julian Adams, et al.
Group Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	MPI94-008CP2DV2CN5M

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include the name of the author (in CAPTIAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and-or country where published.	T[2]
JC	CA	Aoyagi, T. et al., "Structures and Activities of Protease Inhibitors of Microbial Origin," *Proteases and Biological Control*, Vol. 2, Reich, E., et al., eds., Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press, pp. 429-454 (1975).	
	CB	Bachovchin, W., et al,, "Nitrogen-15 NMR Spectroscopy of the Catalytic-Triad Histidine of a Serine Protease in Peptide Boronic Acid Inhibitor Complexes," *Biochem.* Vol. 27, pp. 7689-7697 (1988).	
	CD	Berry, S., et al,, "Interaction of Peptide Boronic Acids with Elastase: Circular Dichroism Studies," *Proteins: Structure, Function, and Genetics*, Vol. 4, pp. 205-210 (1988).	
	CE	Castro, B., et al,, "Peptide Coupling Reagents VI. A Novel, Cheaper Preparation of Benzotriazolyloxytris(dimethylamino)phosphonium Hexafluorophosphate (BOP Reagent)," *Synthesis*, Vol. 11, pp. 751-752 (1976).	
	CF	Dick L., et al., "Degradation of Oxidized Insulin B Chain by the Multiproteinase Complex Macropain (Proteaseome)," *Biochem.*, Vol. 30, pp. 2725-2734 (1991).	
	CG	Goldberg, A., "The Mechanism and Functions of AIP-Dependent Proteases in Bacterial and Animal Cells," *Eur. J. Biochem.*, Vol. 203, pp. 9-23 (1992).	
	CH	Goldberg, A. and Rock, K., "Porteolysis, Proteasomes, and Antigen Presentation," *Nature*, Vol. 357, pp. 375-379 (1992).	
	CI	Hershko, A. and Ciechanover, A., "The Ubiquitin System for Protein Degradation," *Annu. Rev. Biochem.*, Vol. 61, pp. 761-807 (1992).	
	CJ	Kettner, C. and Shenvi, A., "Inhibition of the Serine Proteases Leukocyte Elastase, Pancreatic Elastase, Cathepsin G, and Chymotrypsin by Peptide Boronic Acids," *J. Biol. Chem.*, Vol. 259, pp. 15106-15114 (1984).	
JC	CK	Kettner, C., et al., "Kinetic Properties of the Binding of α-Lytic Protease to Peptide Boronic Acids," *Biochem.*, Vol. 27, pp. 7682-7688 (1988).	

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Sheet 2 of 3

Complete if Known	
Application Number	Not yet Assigned
Filing Dat	December 8, 2003
First Nam d Inventor	Julian Adams, et al.
Group Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	MPI94-008CP2DV2CN5M

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include the name of the author (in CAPTIAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and-or country where published.	T[2]
	CL	Kinder, D. and Katzenellenbogen J., "Acylamino Boronic Acids and Difluoroborane Analogues of Amino Acids: Potent Inhibitors of Chymotrypsin and Elastase," *Journal of Medicinal Chemistry*, Vol. 28, pp. 1917-1925 (1985).	
	CM	Kinder, D., et al., "Antimetastatic Activity of Boro-Amino Acid Analog Protease Inhibitors Against B16BL6 Melanoma In Vivo," *Invasion Metastasis*, Vol. 12, pp. 309-319 (1992).	
	CN	Li, X., et al., "Isolation and Characterization of a Novel Endogenous Inhibitor of the Proteasome," *Biochem.*, Vol. 30, pp. 9709-9715 (1991).	
	CO	Lim, M., et al., "The Solution Conformation of (D)Phe-Pro-Containing Peptides: Implications on the Activity of Ac-(D)Phe-Pro-boroArg-OH, A Potent Thrombin Inhibitor," *Journal of Medicinal Chemistry*, Vol. 36, pp. 1831-1838 (June 25, 1993).	
	CP	Matteson D. and Sadhu, K., "(R)-1-Acetamido-2-phenylethaneboronic Acid. A Specific Transition-State Analogue for Cymotrypsin," *Journal of Am. Chemistry Soc.*, Vol. 103, pp. 5241-5242 (1981).	
	CQ	Murakami, K. and Etlinger, J., "Endogenous Inhibitor of Nonlysosomal High Molecular Weight Protease and Calcium-Dependent Protease," *Proc. Natl. Acad. Sci. USA.*, Vol. 83, pp. 7588-7592 (1986).	
	CR	Rechsteiner, M., "Ubiquitin-Mediated Pathways for Intracellular Proteolysis," *Ann. Rev. Cell Biol.*, Vol. 3, pp. 1-30 (1987).	
	CS	Rivett, A., "The Multicatalytic Proteinase. Multiple Proteolytic Activities," *Journal of Biological Chemistry.*, Vol. 264, pp. 12215-12219 (1989).	
CT	CT	Rivett, A., "The Multicatalytic Proteinase of Mammalian Cells," *Arch. Biochem. Biophys.*, Vol. 268, pp. 1-8 (1989).	

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Substitute for form 1449B/PTO				**Complete if Known**	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	Not yet Assigned
				Filing Date	December 8, 2003
				First Named Inventor	Julian Adams, et al.
				Group Art Unit	N/A
(use as many sheets as necessary)				Examiner Name	N/A
Sheet	3	of	3	Attorney Docket Number	MPI94-008CP2DV2CN5M

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include the name of the author (in CAPTIAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and-or country where published.	T[2]
GLC	CU	Rock, K., et al., "Inhibitors of the Proteasome Block the Degradation of Most Cell Proteins and the Generation of Peptides Presented on MHC Class I Molecules," *Cell*, Vol. 78, pp. 761-771 (September 9, 1994).	
	CV	Sheehan, J., et al., "A Rapid Synthesis of Oligopeptide Derivatives without Isolation of Intermediates," *J. Am. Chem. Soc.*, Vol. 87, pp. 2492-2493 (1965).	
	CW	Takahashi, L., et al., "Crystallographic Analysis of the Inhibition of Porcine Pancreatic Elastase by a Peptidyl Boronic Acid: Structure of a Reaction Intermediate," *Biochem.*, Vol. 28, pp. 7610-7617 (1989).	
	CX	Tanaka, K., et al., "Proteasomes: Protein and Gene Structures," *New Biol.*, Vol. 4, pp. 173-187 (1992).	
	CY	Tsai, D., et al., "Diastereoselection in Reactions of Pinanediol Dichloromethaneboronate," *Organometallics*, Vol. 2, pp. 1543-1545 (1983).	
	CZ	Tsilikounas, E., et al., "Identification of Serine and Histidine Adducts in Complexes of Trypsin and Trypsinogen with Peptide and NonPeptide Boronic Acid Inhibitors by ^{1}H NMR Spectroscopy," *Biochem.*, Vol. 31, pp. 12839-12846 (1992).	
GLC	CCA	Veale C., et al., "Nonpeptidic Inhibitors of Human Leukocyte Elastase. 5. Design, Synthesis, and X-Ray Crystallography of a Series of Orally Active 5-Aminopyrimidin-6-one-Containing Trifluoromethyl Ketones," *J. Med. Chem.*, Vol. 38, pp. 98-108 (January 6, 1995).	

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